

1 A PLUNGE-TYPE ROUTER HAVING IMPROVED
2 PLUNGE RETURN CAPABILITY
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4 Abstract of the Disclosure
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6 A preferred embodiment router is disclosed having a housing which supports a
7 motor wherein the housing is vertically movable along a pair of spaced vertical guide
8 posts of a base structure and wherein the router includes a flexible baffle which can
9 vertically expand and contract as the housing is moved relative to the base structure and
10 wherein at least one post has a coil spring located within the baffle which is configured to
11 bias the housing away from the base structure, with the coil spring having a generally
12 hourglass shaped configuration. The configuration has outer end portions with larger coil
13 diameters, both of which transition to a center portion with a smaller coil diameter. The
14 hourglass configured coil minimizes the possibility of the coil buckling which could
15 result in a loss of spring force as well as a distortion of the shape of the baffle. Also, the
16 amount of travel that is permitted by the hourglass spring is larger than would be
17 achieved by a comparable uniform coil diameter spring made from the same material,
18 because a number of coils can be telescoped together to produce a smaller compressed or
19 solid height of the spring.